

Case Report

RECTAL CANCER MASQUERADING AS ISCHIORECTAL ABSCESS: A CASE REPORT

Krishna Chaitanya Battala¹, Anuradha Panchal², Niket Attarde³, Kaveri Shankar Palwe⁴

¹JR3, Department of General Surgery, DY Patil medical college and Hospital, Nerul, Navi Mumbai, India.

²HOD, Department of General Surgery, DY Patil medical college and Hospital, Nerul, Navi Mumbai, India.

³Associate Professor, Department of General Surgery, DY Patil medical college and Hospital, Nerul, Navi Mumbai, India.

⁴Jr3, Department of General Surgery, DY Patil medical college and Hospital, Nerul, Navi Mumbai, India.

Received : 10/01/2025
Received in revised form : 26/02/2025
Accepted : 13/03/2025

Corresponding Author:

Dr. Anuradha Panchal,
HOD, Department of General Surgery,
DY Patil medical college and Hospital,
Nerul, Navi Mumbai, India.
Email:
krishna.kchaitanya.chaitanya@gmail.com

DOI:10.70034/ijmedph.2025.1.293

Source of Support: Nil,
Conflict of Interest: None declared

Int J Med Pub Health
2025; 15 (1); 1564-1566

ABSTRACT

Rectal adenocarcinoma can present atypically, mimicking benign conditions such as ischiorectal abscess, leading to diagnostic delays. We report a case of a 55-year-old male with chronic perianal swelling, burning defecation, and significant weight loss. MRI revealed a multilobulated inter-sphincteric collection, initially managed as an ischiorectal abscess. Histopathological examination of the drained material identified moderately differentiated adenocarcinoma. PET-CT confirmed localized disease without metastasis. This case highlights the importance of suspecting malignancy in chronic perianal conditions and emphasizes the role of histopathology and multidisciplinary care in achieving timely diagnosis and management to improve patient outcomes.

Keywords: Rectal cancer, ischiorectal abscess, adenocarcinoma, fistula-in-ano, perianal swelling.

INTRODUCTION

Rectal cancer is a significant global health issue, ranking among the most common gastrointestinal malignancies. It accounts for a substantial proportion of colorectal cancer cases, which collectively represent one of the leading causes of cancer-related deaths worldwide.^[1] Despite advancements in diagnostic modalities, rectal cancer can present with diverse clinical manifestations, complicating early detection. While classic symptoms include rectal bleeding, altered bowel habits, and weight loss, atypical presentations may mimic benign conditions, leading to delayed diagnosis and treatment.^[2]

Perianal abscesses and fistulas are relatively common conditions often attributed to infections or inflammatory diseases such as Crohn's disease. However, chronic or recurrent perianal conditions may harbor underlying malignancies, particularly in patients with long-standing symptoms or risk factors.^[3] Malignant transformation in the setting of chronic perianal disease is rare but well-documented, with adenocarcinoma being the most frequently observed histological subtype.^[4]

The diagnostic challenge in distinguishing between benign and malignant perianal conditions lies in

their overlapping clinical and radiological features. Imaging modalities, such as MRI fistulograms, provide detailed anatomical information and are particularly useful in evaluating complex perianal collections. However, their role is limited in identifying malignancies, which require histopathological confirmation.^[5] This underlines the importance of a multidisciplinary approach, combining clinical assessment, imaging, and tissue diagnosis, especially in cases with atypical or chronic presentations.

In addition to clinical vigilance, patient risk factors must be carefully evaluated. Chronic constipation, significant weight loss, and a history of systemic infections such as tuberculosis, as seen in this case, should raise suspicion for an alternative or coexisting pathology.^[6] Timely identification of malignancies masquerading as benign conditions is crucial for initiating appropriate oncological treatment and improving patient outcomes.^[7] This case report highlights a rare presentation of rectal adenocarcinoma mimicking an ischiorectal abscess. It emphasizes the need for heightened awareness and comprehensive evaluation in patients presenting with chronic perianal conditions, particularly when accompanied by red-flag signs such as significant weight loss or systemic symptoms.

CASE REPORT

Patient History

A 55-year-old male presented with complaints of discharge from a long-standing perianal swelling. He reported experiencing a burning sensation during defecation and chronic constipation for 5–6 years. The swelling, initially painless, had been present for 20 years, but discharge had developed in recent months. The patient also reported significant weight loss of approximately 30 kg over the last year. His medical history included tuberculosis 15 years prior, for which he received anti-tubercular therapy.

Clinical Examination

On presentation, the patient's general condition was fair, and vital signs were stable. Per rectal (PR) examination revealed normal anal tone and mucosa. Proctoscopy showed a polyp-like mass at the 5 o'clock position and fistulous openings at the 5 o'clock and 7 o'clock positions. No hemorrhoids were observed.

Imaging Studies

An MRI fistulogram revealed a multilobulated horseshoe-shaped collection measuring $6.3 \times 4.6 \times 7.2$ cm in the inter-sphincteric space, predominantly on the right side. The collection extended superiorly, breaching the right levator ani muscle complex, and reached a smaller collection ($2.3 \times 2.2 \times 2.1$ cm) in the supra-levator space, compressing the adjacent rectum. Bilateral breaches in the external sphincter resulted in tracts that reached the cutaneous surface at the right and left gluteal regions. A suspicious tiny breach in the internal sphincter was noted 24 mm proximal to the anal opening. Restricted diffusion areas suggested an inter-sphincteric abscess (Figure 1).

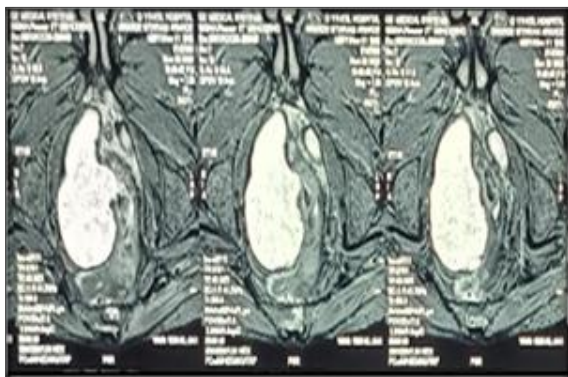


Figure 1: MRI Fistulogram

Surgical Intervention

The patient underwent incision and drainage (I&D) of the ischio-rectal abscess through fistula openings (Figure 2). The procedure was performed in a lithotomy position, and abscess material was sent for microbiological and histopathological analysis. Culture findings revealed *E. coli* sensitive to aminoglycosides and resistant to fluoroquinolones.



Figure 2: Pre- and post-operative image

Histopathological Examination

Microscopic evaluation identified features of moderately differentiated adenocarcinoma. Dysplastic epithelial cells were observed in glandular patterns, with mucin production, hemorrhage, necroinflammatory slough, moderate pleomorphism, loss of nuclear polarity, and focal stromal invasion. Scattered signet ring-like cells were also noted.

PET-CT Findings

A whole-body FDG PET-CT scan showed increased metabolic activity in the inter-sphincteric space, corresponding to the primary malignancy. No evidence of metastatic disease was identified elsewhere in the body.

Outcome and Follow-Up

The patient was referred to the oncology team for further management, including staging and treatment planning. The importance of follow-up and multidisciplinary care was emphasized. This case highlights the diagnostic challenge of distinguishing malignancies from benign conditions in chronic perianal disease.

DISCUSSION

This case underscores the diagnostic challenges of identifying rectal adenocarcinoma masquerading as an ischio-rectal abscess. Chronic or recurrent perianal abscesses are frequently attributed to benign conditions, often delaying the detection of underlying malignancies [8]. While adenocarcinoma is a rare cause of perianal fistulae or abscesses, its potential should not be overlooked, particularly in patients with long-standing symptoms, significant weight loss, or other red-flag signs.

MRI fistulography is the imaging modality of choice for evaluating complex perianal conditions, providing detailed anatomical insights. However, it cannot reliably distinguish between benign and

malignant processes, making histopathological analysis essential for definitive diagnosis.^[9] In this case, the discovery of dysplastic epithelial cells and signet ring-like cells in the abscess material was pivotal in identifying moderately differentiated adenocarcinoma.

This case also highlights the importance of multidisciplinary management in complex presentations. Initial surgical drainage of the abscess was critical for symptom relief but delayed the diagnosis of malignancy. Early consideration of a neoplastic etiology, coupled with prompt oncological referral, could improve outcomes in similar cases. The absence of metastatic disease on PET-CT suggests a favorable prognosis if treated aggressively.^[10] This case emphasizes the need for vigilance in chronic perianal conditions to avoid delayed cancer diagnoses and ensure timely, targeted interventions.

CONCLUSION

This case highlights the importance of considering malignancy in chronic perianal conditions, especially when associated with red-flag signs such as significant weight loss or long-standing symptoms. Rectal adenocarcinoma can mimic benign conditions like ischiorectal abscess, delaying diagnosis and treatment. Comprehensive evaluation, including imaging, histopathology, and multidisciplinary management, is essential for early detection. Prompt recognition of atypical presentations can significantly improve patient outcomes, emphasizing the need for vigilance in managing chronic perianal diseases with complex presentations.

REFERENCES

1. Bracey EE, Mathur P, Dooleniya M, Joshp A, Dawson PM. Unusual perianal tumours masquerading as abscesses. *International journal of clinical practice*. 2003 May;57(4):343-6.
2. Tekbaş A, Mothes H, Settmacher U, Schuele S. Non-mucinous adenocarcinomas and squamous cell carcinomas of the anal region masquerading as abscess or fistula: a retrospective analysis and systematic review of literature. *Journal of Cancer Research and Clinical Oncology*. 2022 Jun 1:1-4.
3. Fonseca MC, Lenik J, Achue-Egbe Y, Ciccone L, Khan G. S2239 Signet Cell Carcinoma of the Rectum Disguised as Recurrent Horseshoe Perianal Abscess: A Case Report. *Official journal of the American College of Gastroenterology | ACG*. 2023 Oct 1;118(10S):S1603-4.
4. Puryško AS, Coppa CP, Kalady MF, Pai RK, Leão Filho HM, Thupili CR, Remer EM. Benign and malignant tumors of the rectum and perirectal region. *Abdominal imaging*. 2014 Aug; 39:824-52.
5. Zhou H, Shao H, Ho JK, Wang X, Han C, Chen G. Rare skin fistulas relating to ascending colonic carcinoma: an unusual mode of revelation. *The International Journal of Lower Extremity Wounds*. 2018 Mar;17(1):48-53.
6. Azmi FP, Rahman NA, Mazlan L, Basiron N, Imran FH. A case of large perianal mucinous adenocarcinoma arising from recurrent abscess and complex fistulae. *Case Reports in Surgery*. 2020;2020(1):1798543.
7. Anajjar M, Fadili A, Gridda M, Elbrahmi Y, Njoumi N, Elfahssi M, Elhajjouji A, Aitali A. Anal Abscess Revealing Rectal Cancer: Case Report. *Asian Journal of Case Reports in Surgery*. 2023 Nov 4;6(2):562-6.
8. Moomjian LN, Clayton RD, Carucci LR. A Spectrum of Entities That May Mimic Abdominopelvic Abscesses Requiring Image-guided Drainage. *RadioGraphics*. 2018 Jul;38(4):1264-81.
9. Arkenbosch JH, van Ruler O, de Vries AC, van der Woude CJ, Dwarkasing RS. The role of MRI in perianal fistulizing disease: diagnostic imaging and classification systems to monitor disease activity. *Abdominal Radiology*. 2024 Aug 24:1-9.
10. Capirci C, Rampin L, Erba PA, Galeotti F, Crepaldi G, Banti E, Gava M, Fanti S, Mariani G, Muzzio PC, Rubello D. Sequential FDG-PET/CT reliably predicts response of locally advanced rectal cancer to neo-adjuvant chemoradiation therapy. *European journal of nuclear medicine and molecular imaging*. 2007 Oct; 34:1583-93.